(949) 724-6000



City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575

October 15, 2002

Dean Gould Southwest Division, BRAC Operations Office ATTN: Code 06CC.DG 1220 Pacific Highway San Diego, CA 92132

RE: Proposed Plan for Site 16 Remediation

Dear Mr. Gould Com

Thank you for the opportunity to comment on the Proposed Plan for addressing the Site 16 groundwater contamination at Marine Corps Air Station El Toro. We understand the plan calls for the use of monitored natural attenuation with institutional controls to remediate the TCE in the groundwater and to establish a backup plan involving down-gradient groundwater extraction and containment if natural attenuation fails to remediate the contamination as expected. Further, we understand that groundwater extraction is difficult at this particular site and that dilution to below maximum contamination levels (MCLs) is expected to occur over time.

While the City of Irvine does not object in principle to the use of natural attenuation, we believe there are a number of outstanding issues that should be resolved prior to adoption of the proposed plan. If these issues cannot be addressed satisfactorily, we believe that the Navy should adopt the backup remedy as its primary plan for the site.

- 1. It appears that groundwater flows need further characterization. Given that the plume appears stable, groundwater flow may be minimal or variable depending on seasonal precipitation. This suggests that the dilution rate may be difficult to predict. We are concerned that the estimate of 19 years for complete cleanup may not be bounded by a high degree of confidence and could be substantially longer. We assume that there is greater certainty around the expected completion time for the active extraction alternative (9 years). If, after characterization of the groundwater, the proposed alternative is substantially longer (e.g., 2x or more) than the original estimate, we suggest reviewing the alternatives to determine if the preferred remedy is still the most protective of public health and safety.
- 2. We believe that the remediation plan should specify specific milestones including rates of dilution over time that the preferred alternative should meet. Further, the plan should specify what will happen if the milestones are not met and the specific conditions under which the backup remedy would be implemented. The City would prefer to avoid additional studies and investigations if the milestones are not met.

- 3. The City of Irvine has been working closely with Department of the Navy representatives on a reuse plan that is consistent with Measure W approved by Orange County voters. Site 16 is within an area zoned for passive park use and a riparian corridor. Current plans call for a meadow to encompass the Site 16 area. The City has several questions about the preferred alternative and its consistency with the reuse plan. These include:
 - a. How will the City's reuse plan affect the proposed remediation strategy?
 - b. Would grading be allowed at the site?
 - c. How would landscaping and irrigation affect the remediation strategy, assuming a meadow with grasses, trees, and shrubs?
 - d. What are the specific locations of current and proposed monitoring wells?
 - e. What kind of protection will be required for the wells (e.g., covers and locks, fences, etc.) and will there be requirements to keep public access a minimum distance from the wells?
 - f. What kind of access by the Navy and regulatory agencies will be required for the preferred alternative; will provision of access for drill rigs be required into the future?
 - g. What kind of access, institutional controls, etc, would be required for the backup plan if implemented?
 - h. What specific institutional controls will be-required for the site?
 - i. Current City policy calls for the use of Integrated Pest Management for City properties; will the use of typical landscape management practices (pesticides, fertilizers, etc.) be consistent with the preferred alternative?

The City of Irvine appreciates the opportunity to work with the Navy to resolve these issues. Please contact either Glen Worthington at (949) 724-6370 or myself if you have any questions or would like to discuss these issues.

Thank you for your consideration.

Sincerely,

DANIEL JUNG/

Director of Strategic Programs

c: Allison Hart, City Manager

Michael S. Brown, Michael S. Brown and Associates